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ABSTRACT

Graduation rates of the fall semester freshman classes that entered the Bloomington campus of Indiana University between 1980 and 1974 were studied. By examining the percentage of students completing a baccalaureate degree within four years of their matriculation, it was found that the graduation rate from the Bloomington campus significantly declined (40 percent among 1970 freshmen compared to 33 percent of 1974 freshmen). Within the same time periods, there was an increase in the percentage of students who received their degree in the fifth year since matriculation. After the fifth year the total increase in the percentage graduating from the campus was less than 5 percent. Similarly, the increase in the graduation rate from the Indiana University System was never more than 6 percent after the fifth year. By examining the data on Bloomington matriculants graduating from regional campuses, it was found that the total percentage never exceeded 9 percent of a freshman class. There was no trend among the four freshman classes to graduate at a higher rate from regional campuses. Data are also presented on the percentage of students completing other degrees/awards (certificate, Associate of Arts, and other undergraduate nonbaccalaureate degrees). Some comparisons are made to similar data from Iowa. Recommendations are included. (SW)

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GRADUATION RATES OF FRESHMEN WHO ENTERED INDIANA UNIVERSITY-BLOOMINGTON BETWEEN 1970-1974

by

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BUREAU OF EVALUATIVE STUDIES AND TESTING
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GRADUATION RATES OF FRESHMEN WHO ENTERED INDIANA UNIVERSITY-BLOOMINGTON BETWEEN 1970-1974

In the fall of 1975, the Bureau of Evaluative Studies and Testing began a series of studies on the persistence of students who had matriculated at Indiana University (I.U.). A recent study by Brigman and Jacobs (1979) focused on this phenomena in the first two years of an undergraduate program at I.U. Of the freshman class which entered the Bloomington campus in the fall of 1974, sixty-seven (67) percent were still enrolled at an Indiana University System campus in the fall of 1976. Of the students who had enrolled in the fall of 1974, 18 percent had voluntarily withdrawn and 14 percent had left the University in academic difficulty.

According to a recent review of research on college attrition, the major portion of the attrition is observed in the first two years of the college program (Pantages & Creedon, 1978). After the first two years of an undergraduate program only one in six remaining students exited the original institution of higher education.

When a student enters an institution of higher education, the intended goal is to achieve a college degree. A recent study by the American Council on Educatio- (College dropout rate," 1980) found that for a typical group of ten freshmen, four graduated from the original college in four years and one graduated after that period. In other words, fifty (50) percent of the freshmen entering the average institution of higher education will graduate from that institution at some point in the future.

The present research report addressed the question of the rates of graduation from Indiana University for students who matriculated as freshmen on the Bloomington campus.

Method

This study examined the graduation rates of the fall semester freshman classes which entered the Bloomington campus of I.U. between 1970 and 1974. For each fall semester (Fall 1970, Fall 1971, Fall 1972, and Fall 1974),* the beginning first semester freshmen on the Bloomington campus were identified. University records were checked to determine if a student had received an undergraduate degree from Indiana University by August, 1978. The date that the degree was conferred, the type of degree, and the campus in the I.U. System awarding the degree were recorded. Initial data extraction was performed by the Office of the Registrar-Student Information Systems.

Based on the data provided by the Student Information Systems, undergraduate degrees were divided into two categories: baccalaureate degrees (4 year programs) and other undergraduate degrees. Other undergraduate degrees included certificates (one or two year programs), Associate of Arts degrees (two year programs) and other non-baccalaureate undergraduate degrees offered by Indiana University.

Summaries were prepared of the numbers and percentages of a freshman class who were awarded degrees by Indiana University within a period of two to eight years (if available) of their matriculation on the Bloomington campus. In addition, the graduation information was summarized by the unit awarding the degree, i.e., the Bloomington campus or the I.U. System.

The numbers and percentages of students receiving degrees did not include the students who transferred from the I.U. System to other universities. No information was obtained to identify students who were <u>not</u> enrolled for a full course load (12+ hours per semester) or who stopped out for one or more semesters during the traditional undergraduate program at I.U.

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*Data were not available on the freshman class who entered in the fall of 1973.

Results

For each freshman class the results of the present study are presented in two tables, a table A and a table B. Table A provides a summary of the numbers and percentages of the freshman class which received degrees from the Bloomington campus and from the I.U. System by year since matriculation. Table B provides the total number of degrees awarded by each campus in the I.U. System to the Bloomington matriculants.

Tables 1A and 1B present information for the Fall 1970 freshman class. Of the 4621 matriculants, forty-one (41) percent were awarded undergraduate degrees from the Bloomington campus within four years; 49 percent were awarded degrees within five years, and 51 percent within six years. Including all campuses in the I.U. System, these figures increased to 46 percent, 56 percent, and 60 percent at the end of four, five, and six years respectively. Eight years after matriculation these figures reached 53 percent graduating from the Bloomington campus and a total of 62 percent from the I.U. System.

Information on the 4652 freshmen who entered the Bloomington campus in the fall of 1971 is presented in Tables 2A and 2B. Four years after matriculation, thirty-five (35) percent of the students had received undergraduate degrees from the Bloomington campus. This increased to 46 percent after five years, 48 percent after six years, and finally 50 percent after seven years. This seven year percentage for the freshman class of 1971 was below the five year percentage for the 1970 class. Including the transfers to other I.U. campuses, the percentages increase to 40 percent within four years, 52 percent within five years, 56 percent within six years, and 57 percent within seven years.

In the fall of 1972 there were 4722 beginning freshmen on the Bloomington campus of I.U. This was the largest entering class in the present study (see Tables 3A and 3B). At the end of four years 35 percent were awarded degrees from the Bloomington campus. One year later this increased to 46 percent and

two years later to 49 percent. Examining the I.U. System, these figures were 41 percent, 54 percent, and 58 percent respectively.

Presented in Tables 4A and 4B is the most recent class for which graduation rate information was available at the time of the study, the fall of 1974. Of 4676 entering freshmen, 34 percent were awarded degrees by the Bloomington campus within four years of matriculation. When the I.U. System was examined, the percentage graduating increased to thirty-eight (38).

A summary of the four freshman classes is presented in Tables 5 and 6. Table 5 presents persistence information about baccalaureate degrees only, while Table 6 combines the information on all undergraduate degrees. An average percentage graduating each year since matriculation is provided in Tables 5 and 6. While the information from the four freshman classes was included in the average four year graduation rate, one less freshman class was included in each subsequent year's average. The average percentage of entering students on the Bloomington campus receiving undergraduate degrees from any I.U. campus within four years was 42 percent; within five years 54 percent; within six years 58 percent, and within seven years 59 percent.

There was a significant difference in the four year graduation rate of the freshman classes from the I.U. System ($\chi^2=61.56$; $df=3$, $p<.05$). The percentage of freshmen receiving degrees from I.U. in a four year period since matriculation has declined since the entering class in the fall of 1970.

Figure 1 is a graphic presentation of the cumulative percentages of beginning freshmen receiving undergraduate degrees from the Bloomington campus after four, five, and six years.

Table 1A

Numbers and Cumulative Percentages of Freshmen in Fall 1970 (N=4621) Receiving Undergraduate Degrees by Years since Matriculation

Degree		Years since Matriculation						
		2	3	4	5	6	7	8
AWARDED BY THE BLOOMINGTON CAMPUS OF INDIANA UNIVERSITY								
Baccalaureate	%	-	2.3	40.4	48.6	51.0	52.2	52.6
	No./Yr.	1	104	1762	378	112	55	19
Other[a]	%	0.1	0.3	0.4	0.4	0.4	0.4	0.5
	No./Yr.	9	5	4	0	2	0	2
Total	%	0.2	2.6	40.8	49.0	51.4	52.6	53.1
	No./Yr.	10	109	1766	378	114	55	21
AWARDED BY THE INDIANA UNIVERSITY SYSTEM								
Baccalaureate	%	-	2.3	45.4	55.2	58.3	59.9	60.6
	No./Yr.	1	106	1991	453	142	76	30
Other[a]	%	0.2	0.6	0.9	1.1	1.2	1.3	1.4
	No./Yr.	11	19	14	6	7	3	6
Total	%	0.3	3.0	46.4	56.3	59.5	61.2	62.0
	No./Yr.	12	125	2005	459	149	79	36

Table 1B

Total Number of Degrees Awarded by Campuses in the Indiana University System to the Fall 1970 (N=4621) Freshman Class within Eight Years since Matriculation

Degree	I. U. Campus						
	Blgtn	Fort Wayne	IUPUI	Kokomo	North-west	South Bend	South-west
Baccalaureate	2431	11	248	3	13	32	11
Other[a]	22	1	33	1	4	2	3
Total	2453	12	331	4	17	34	14

-Less than one-tenth of one (0.1) percent of entering freshman class.

[a]Certificate, Associate of Arts, and other undergraduate non-baccalaureate degrees offered by Indiana University.

Table 2A

Numbers and Cumulative Percentages of Freshmen in Fall 1971 (N=4652) Receiving Undergraduate Degrees by Years since Matriculation

Degree		Years since Matriculation					
		2	3	4	5	6	7
AWARDED BY THE BLOOMINGTON CAMPUS OF INDIANA UNIVERSITY							
Baccalaureate	%	0.1	2.6	35.2	45.0	47.8	48.9
	No./Yr.	4	116	1917	455	131	53
Other[a]	%	0.2	0.4	0.6	0.7	0.7	0.7
	No./Yr.	7	12	11	2	0	1
Total	%	0.2	3.0	35.9	45.7	48.5	49.6
	No./Yr.	11	128	1528	457	131	2309
AWARDED BY THE INDIANA UNIVERSITY SYSTEM							
Baccalaureate	%	0.1	2.7	39.2	50.6	53.9	55.3
	No./Yr.	4	120	1699	532	152	67
Other[a]	%	0.3	0.8	1.3	1.6	1.7	2.0
	No./Yr.	13	24	24	15	5	10
Total	%	0.4	3.5	40.5	52.3	55.6	57.3
	No./Yr.	17	144	1723	547	157	77

Table 2B

Total Number of Degrees Awarded by Campuses in the Indiana University System to the Fall 1971 (N=4652) Freshman Class within Seven Years since Matriculation

Degree	I. U. Campus						
	Blgtn	Fort Wayne	IUPUI	Kokomo	North-west	South Bend	South-west
Baccalaureate	2276	12	254	1	11	16	4
Other[a]	33	6	40	2	9	0	1
Total	2309	18	294	3	20	16	5

[a]Certificate, Associate of Arts, and other undergraduate non-baccalaureate degrees offered by Indiana University.

Table 3A

Numbers and Cumulative Percentages of Freshmen in Fall 1972 (N=4722) Receiving Undergraduate Degrees by Years since Matriculation

Degree		Years since Matriculation				
		2	3	4	5	6
AWARDED BY THE BLOOMINGTON CAMPUS OF INDIANA UNIVERSITY						
Baccalaureate	%	0.0	1.8	34.8	45.6	48.2
	No./Yr.	0	85	1557	513	119
Other[a]	%	0.2	0.4	0.7	0.8	0.8
	No./Yr.	11	9	11	5	1
Total	%	0.2	2.2	35.4	46.4	48.9
	No./Yr.	11	94	1568	518	120
AWARDED BY THE INDIANA UNIVERSITY SYSTEM						
Baccalaureate	%	0.0	1.9	39.1	51.9	55.0
	No./Yr.	0	70	1754	607	147
Other[a]	%	0.3	1.1	2.0	2.3	2.5
	No./Yr.	13	40	41	16	8
Total	%	0.3	3.0	41.0	54.2	57.5
	No./Yr.	13	130	1795	623	155

Table 3B

Total Number of Degrees Awarded by Campuses in the Indiana University System to the Fall 1972 (N=4722) Freshman Class within Six Years since Matriculation

Degree	I. U. Campus						
	Bloomington	Fort Wayne	IUPUI	Kokomo	Northwest	South Bend	Southwest
Baccalaureate	2274	15	274	2	7	19	7
Other[a]	37	7	55	9	5	4	1
Total	2311	22	329	11	12	23	8

[a]Certificate, Associate of Arts, and other undergraduate non-baccalaureate degrees offered by Indiana University.

Table 4A

Numbers and Cumulative Percentages of Freshmen in Fall 1974 (N=4670) Receiving Undergraduate Degrees by Years since Matriculation

Degree		Years since Matriculation		
		2	3	4
AWARDED BY THE BLOOMINGTON CAMPUS OF INDIANA UNIVERSITY				
Baccalaureate	%	0.0	1.1	33.1
	No./Yr.	0	53	1496
Other[a]	%	0.4	0.7	0.8
	No./Yr.	20	12	4
Total	%	0.4	1.8	33.9
	No./Yr.	20	65	1500
AWARDED BY THE INDIANA UNIVERSITY SYSTEM				
Baccalaureate	%	0.0	0.7	36.4
	No./Yr.	0	53	1649
Other[a]	%	0.5	1.3	2.1
	No./Yr.	23	39	38
Total	%	0.5	2.0	38.5
	No./Yr.	23	92	1687

Table 4B

Total Number of Degrees Awarded by Campuses in the Indiana University System to the Fall 1974 (N=4676) Freshman Class within Four Years since Matriculation

Degree	I. U. Campus						
	Blgtn	Fort Wayne	IUPUI	Kokomo	North-west	South Bend	South-west
Baccalaureate	1549	3	141	1	3	2	3
Other[a]	36	5	47	1	8	3	0
Total	1585	8	188	2	11	5	3

[a]Certificate, Associate of Arts, and other undergraduate non-baccalaureate degrees offered by Indiana University.

Table 5

Cumulative Percentages of Freshmen Receiving Baccalaureate Degrees from Indiana University within Eight Years since Matriculation

Beginning Sem./Year	Number of Freshmen	Degree Awarding Unit	Years since Matriculation					
			3	4	5	6	7	8
Fall 1970	4621	Bloomington	2.3	40.4	48.6	51.0	52.2	52.6
		IU System	2.3	45.4	55.2	58.3	59.9	60.6
Fall 1971	4652	Bloomington	2.6	35.2	45.0	47.8	48.9	
		IU System	2.7	39.2	50.6	53.9	55.3	
Fall 1972	4722	Bloomington	1.8	34.8	45.6	48.2		
		IU System	1.9	39.1	51.9	55.0		
Fall 1974	4676	Bloomington	0.7	33.1				
		IU System	0.7	36.4				
Average	4668	Bloomington	1.8	35.9	46.4	49.0	50.6	52.6
		IU System	1.9	40.0	52.6	55.7	57.6	60.6

Table 6

Cumulative Percentages of Freshmen Receiving Undergraduate Degrees from Indiana University within Eight Years since Matriculation

Beginning Sem./Year	Number of Freshmen	Degree Awarding Unit	Years since Matriculation					
			3	4	5	6	7	8
Fall 1970	4621	Bloomington	2.6	40.8	49.0	51.4	52.6	53.1
		IU System	3.0	46.4	56.3	59.5	61.2	62.0
Fall 1971	4652	Bloomington	3.0	35.9	45.7	48.5	49.6	
		IU System	3.5	40.5	52.3	55.6	57.3	
Fall 1972	4722	Bloomington	2.2	35.4	46.4	48.9		
		IU System	3.0	41.0	54.2	57.5		
Fall 1974	4676	Bloomington	1.8	33.9				
		IU System	2.5	38.5				
Average	4668	Bloomington	2.4	36.5	47.0	49.6	51.1	53.1
		IU System	3.0	41.6	54.3	57.5	59.3	62.0

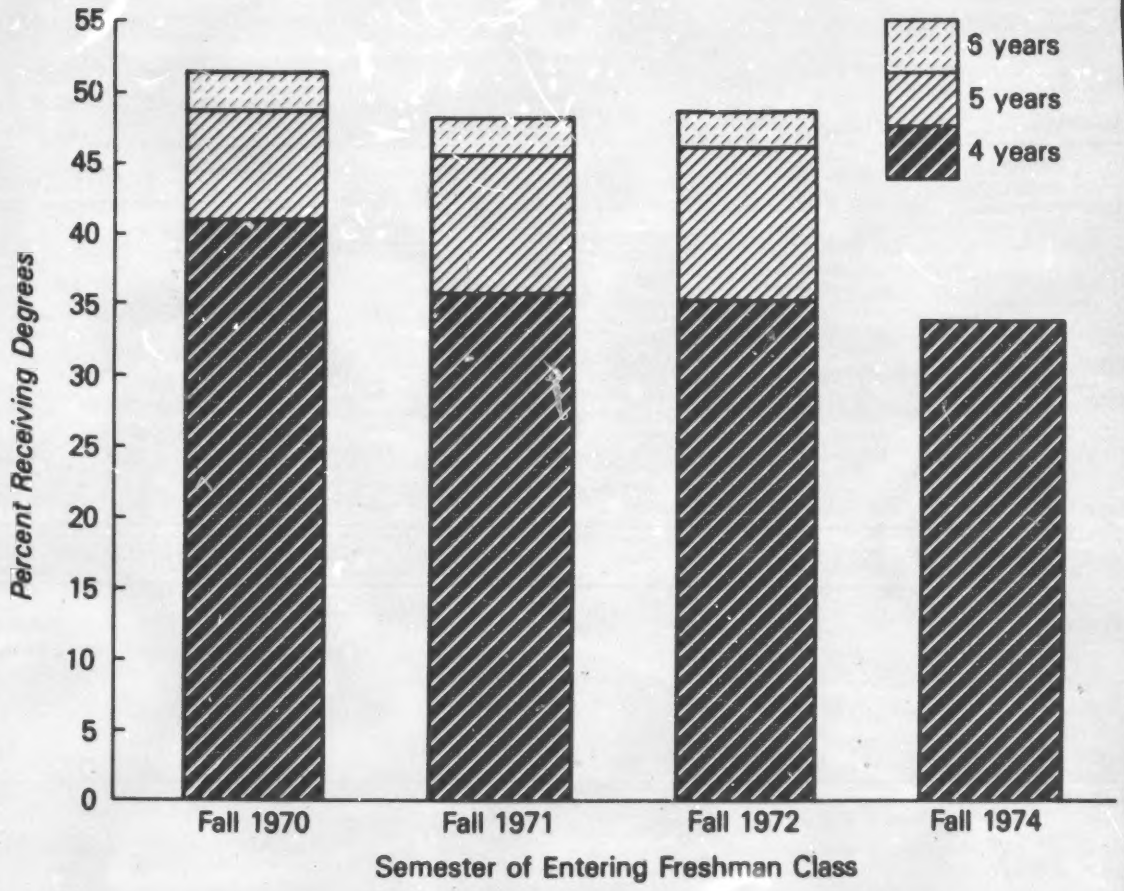

Figure 1. Cumulative percentages of entering freshmen receiving degrees from the Bloomington Campus of Indiana University within six years since matriculation.

Discussion

This study examined the graduation rates of students who matriculated as freshmen on the Bloomington campus of Indiana University. The graduation rates of four freshman classes were evaluated by examining the percentages of students who graduated within specified periods of time since matriculation.

Examining the percentage of students completing a baccalaureate degree within four years of their matriculation, it was found that the graduation rate from the Bloomington campus has significantly declined from a high of 40 percent among the freshmen who entered in the fall of 1970 to a low of 33 percent of the freshmen who entered in the fall of 1974. In fact, the 1970 freshman class was the only class in which 40 percent or more of the entering class received undergraduate degrees from the original institution by the end of four years.

Within the same time periods, there has been an increase in the percentage of students who received their degree in the fifth year since matriculation (8.2 percent for the 1970 class, 9.8 percent for the 1971 class, and 11.0 percent for the 1972 class). This suggests that more students were going beyond the traditional four year frame to attain the goal of a college degree. It is beyond the scope of the present study to ascertain the cause for this change. A change in the academic requirements, and increase in the number of incompletes (I's) or withdrawals (W's) awarded in courses, lower course loads per semester, an increase in the number of students stopping out and/or an economic picture that did not promise a college graduate a good job immediately after graduation may have contributed to the extension of the four year time frame to complete the college degree.

After the fifth year the total increase in the percentage graduating from the Bloomington campus was less than 5 percent. Similarly, the increase in the graduation rate from the I.U. System was never more than 6 percent after the fifth year.

Examining the data on Bloomington matriculants graduating from regional campuses, it was noted that this total percentage never exceeded 9 percent of a freshman class. There was no trend among the four freshman classes to graduate at a higher rate from regional campuses.

A collaborative study by the state institutions of higher education in Iowa provides some comparison data for the I.U. graduation rates (Wielenga, Cox, Jones & Gowan, 1977). The study was performed on the freshmen who entered the University of Iowa (U of I), the University of Northern Iowa (UNI) or Iowa State University (ISU) between the 1970 summer session and the spring semester (quarter) of 1971. By the end of the 1976 summer session (within six years), the percentages of students completing a baccalaureate degree from the original institution were 47 percent of the 3077 students at the U of I, 48 percent of the 2154 students at the UNI and 57 percent of the 3921 students at ISU. An additional one to four percent of the freshman classes had earned a four year degree from one of the other two institutions included in the study.

Based on the data in the present study, fifty-one (51) percent of the Fall 1970 freshman class at Indiana University had completed a baccalaureate degree by the end of the summer of 1976. However, it should be noted that this is not a directly comparable figure for the Iowa data. According to a study by Chase, et al. (1976), the persistence rate for students who entered the University during a spring semester was substantially lower than the persistence of the students who entered the University in a fall semester. In other words, it would be expected that the 51 percent figure would be lower if the present study had included the spring semester entrants.

Closer to home, of the 4932 students who began at the West Lafayette campus of Purdue University in the fall of 1970, sixty-one (61) percent had graduated in five and one-half years from the Purdue University System (Office of the Registrar-

Purdue University Communication, February 9, 1978). Comparable information for the 1970 freshman class at the Bloomington campus of I.U. indicated that 57 percent had completed undergraduate degrees.

The graduation rate of students needs to be viewed as an outcome of the interaction of both the characteristics of the student population and the attributes of the institution. According to Tinto (1975), "It is the characteristics of the institution - its resources, facilities, structural arrangements, and composition of its members - that place limits upon the development and integration of individuals within the institution." Based on studies by Rock, Centra and Linn (1970), Kamens (1971) and Astin (1975) students attending institutions with a higher percentage of faculty with doctorates and/or institutions with higher expenditures per student were the institutions where a student was more likely to graduate than could be expected based on the student's characteristics alone.

Conclusions and Recommendations

The information in this report suggests two major conclusions of importance for the University community. From the freshman class of 1970 to the freshman class of 1974, there has been a significant decline in the rate of entering freshmen who graduated from the Bloomington campus and from the System as a whole. With the changes that continue to be implemented in the undergraduate program at Indiana University and the economic and social changes in the nation, it is very important to examine on an annual basis the graduation rates of these four classes as well as the more recent freshman classes.

Secondly, there is evidence in the present study of an extension of the traditional undergraduate academic program to a four and one-half or five year program. An increasing per-

centage of the matriculants on the Bloomington campus were receiving their degrees during the fifth year since matriculation.

An additional factor not included in the present study would be the examination of the graduation rates for students who transferred to Indiana University's Bloomington campus after matriculating at another institution of higher education.

Several studies have been done on the students who have withdrawn from the institution without completing a degree. Another approach that might shed light on the relationship of the students to the University would be a study of the students who successfully complete an undergraduate program at Indiana University.

An assessment of the causes of the increased fifth year graduation rate as well as the general decline needs to be undertaken. Is it a result of increased undergraduate requirements or other internal University related factors? How have the changing economic situation and social cultural attitudes affected views of higher education and the attainment of an undergraduate degree?

The rate at which students who begin their careers in higher education at Indiana University complete the goal of an undergraduate degree is only one measure of the effectiveness of the institution. Although an index of graduation rates is relatively superficial, it provides a basis of comparison and can be used to direct further inquiries into the relationships between students and the institution.

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